

REMARKS/ARGUMENTS

Claims 5, 14, 16 and 18 are pending. By this Amendment, claims 1, 2, 6-13, 15 and 17 are cancelled without prejudice or disclaimer. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

Rejection Under 35 U.S.C. §103

The Office Action rejects claims 1, 2 and 5-18 under 35 U.S.C. §103(a) over WO 02/02684 to Malz et al. ("Malz")\* in view of U.S. Patent No. 5,175,349 to Gupta et al. ("Gupta"). By this Amendment, claims 1, 2, 6-13, 15 and 17 are cancelled, rendering the rejection moot as to those claims. As to the remaining claims, Applicants respectfully traverse the rejection.

Claim 5 recites "[a] mixture comprising: (a) isocyanate; and (b) a stabilizer comprising at least one compound given by formula (X) and/or (XX) ..." (emphasis added). Malz and Gupta do not disclose or suggest such mixtures.

Claim 5 is directed to a combination of isocyanate and particular stabilizers given by formula (X) and/or (XX). Malz discloses stabilizers for thermoplastic polyurethanes that include compounds that are similar in structure to the stabilizers in claim 5. *See, e.g., Malz*, Abstract. However, Malz does not include disclosure of using stabilizers given by formula (X) and/or (XX) to stabilize isocyanates.

Gupta discloses using a nucleus-substituted 4-hydroxyphenyl propionic acid compounds to stabilize polyisocyanates. *See Gupta*, column 1, lines 5 to 7. Gupta does not disclose the stabilizers of claim 5, or indicate that the disclosed stabilizers could or should be used to stabilize thermoplastic polyurethanes.

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\* Discussion of Malz is made with reference to U.S. Patent No. 6,995,230, which the Office Action asserts is an English-language equivalent of Malz.



Malz discloses stabilizers for thermoplastic polyurethanes and Gupta discloses stabilizers for polyisocyanates. As discussed previously, a proposed modification or combination must be supported by a "reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (U.S. 2007). The Office Action asserts that it would have been obvious to substitute the stabilizers of Malz for the stabilizers of Gupta because the stabilizers of Gupta are phenolic stabilizers and Malz indicates that the disclosed stabilizers are alternatives to phenolic stabilizers. See Office Action, pages 2 to 3. However, Malz indicates that the disclosed stabilizers are alternatives to phenolic stabilizers in stabilizing thermoplastic polyurethanes. See Malz, column 1, lines 20 to 27. There is nothing in the cited references that would have led a skilled artisan to use the thermoplastic polyurethane stabilizers of Malz to stabilize polyisocyanates as in Gupta.

For the foregoing reasons, a *prima facie* case of obviousness has not been made.

However, even if a *prima facie* case were made, such case is rebutted by the results shown in the present specification – "[a] *prima facie* case of obviousness ... is rebuttable by proof that the claimed compounds possess unexpectedly advantageous or superior properties." See MPEP §2144.09 (citing *In re Papesch*, 315 F.2d 381 (C.C.P.A. 1963)).

Claim 5 is directed to a mixture of isocyanate and particular stabilizers. Gupta, the closest reference cited in the Office Action, is directed to mixtures of isocyanate and stabilizers outside of the scope of claim 5. Applicants direct attention, in particular, to Example 5 of the present specification. Example 5 includes a comparison of a mixture according to claim 5 with mixtures including isocyanate and stabilizers outside of the scope of claim 5. In particular, the stabilizers in the comparative mixtures including IRGANOX 1076 and IRGANOX 1141, respectively. See present specification, page 10, line 34 to page 11, line 8. As is evident from the product information for IRGANOX 1076 and IRGANOX



1141 attached hereto, IRGANOX 1076 and IRGANOX 1141 are more similar to the stabilizers of claim 5 than any of the corresponding stabilizers disclosed in Gupta. See MPEP 716.02(e) (citing *In re Holladay*, 199 USPQ 516 (CCPA 1978)) (Applicants may compare the claimed invention with prior art that is more closely related to the invention than the prior art relied upon by the examiner).

The results in Example 5 demonstrate that mixtures of isocyanates and the stabilizers of claim 5 are substantially more stable over time than mixture of isocyanates and IRGANOX 1076 or IRGANOX 1141 (stabilizers more similar to the stabilizers of claim 5 than any stabilizer disclosed in Gupta). These unexpected results are objective evidence of the improvements of the mixture of claim 5 over the mixtures of Gupta and, thus, these results rebut any suggestion that it would have been obvious to modify the mixtures of Gupta by incorporating the stabilizers of Malz.

As explained, claim 5 would not have been rendered obvious by Malz and Gupta. Claims 14, 16 and 18 depend from claim 5 and, thus, also would not have been rendered obvious by Malz and Gupta. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

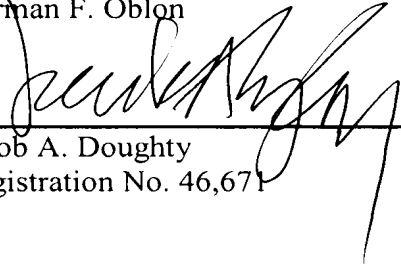


Conclusion

For the foregoing reasons, Applicants submit that claims 5, 14, 16 and 18 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

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**Attachment:**

Product Information for IRGANOX 1076 and IRGANOX 1141